

Supplementary Table S5 GO groups that are over represented in the 924 genes that show significant divergence within orthologous groups

GO	GO desc	chi-squared	p-value
GO:0006810	transport	13.8251	0.0009952
GO:0000004	biological process undefined	11.7565	0.0028
GO:0043283	biopolymer metabolism	9.3052	0.009537
GO:0044237	cellular metabolism	8.1793	0.01675
GO:0006629	lipid metabolism	8.063	0.01775
GO:0016070	RNA metabolism	7.9439	0.01884

To identify which functions might be most divergent, we examined the dN/dSbranch estimates between each species and each GO category. We found five informative* GO categories with significantly different dN/dSbranch estimates between species (transport, biopolymer metabolism, cellular metabolism, lipid metabolism, RNA metabolism, Kruskal-Wallis tests, $P < 0.05$).